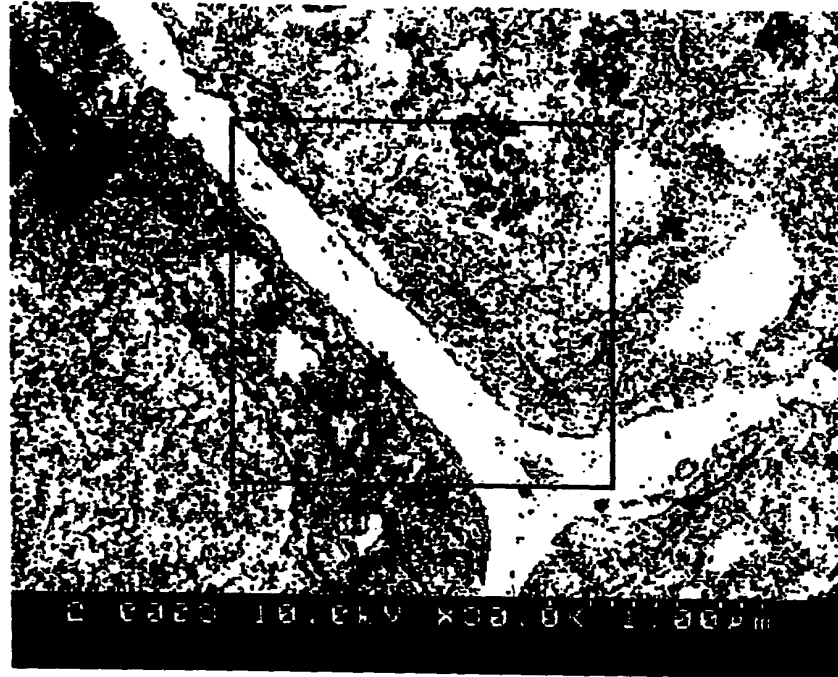
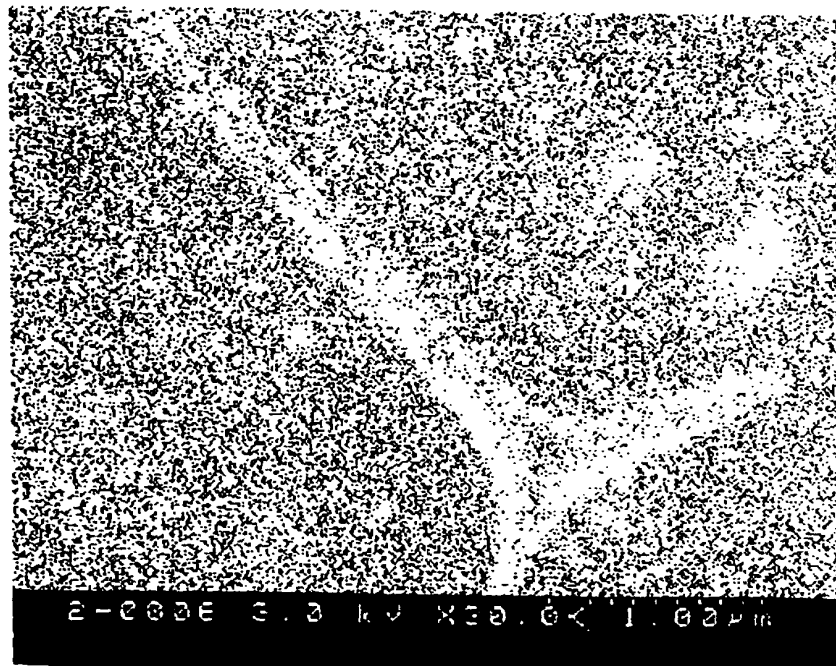


FIG. 1A



ELECTRON ACCELERATING VOLTAGE : 10kV

FIG. 1B



ELECTRON ACCELERATING VOLTAGE : 3kV

FIG. 2

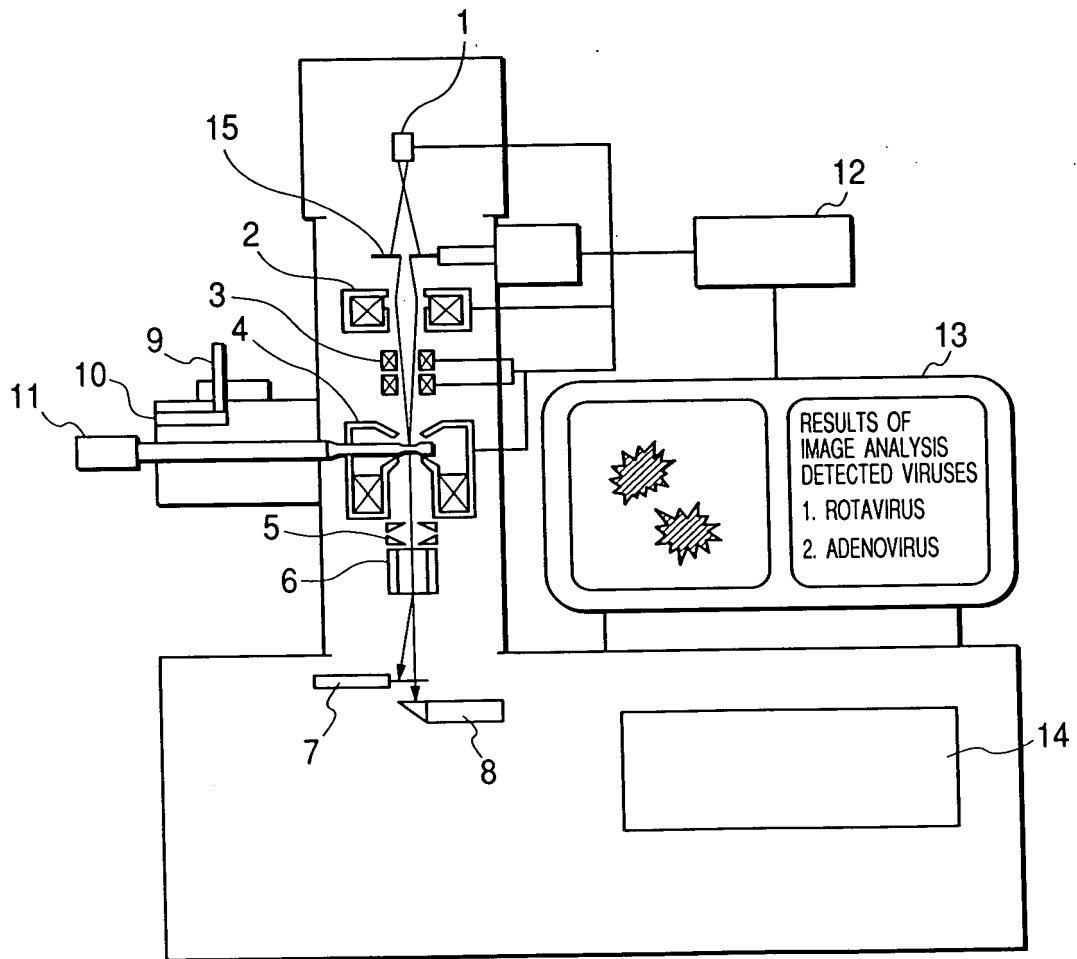


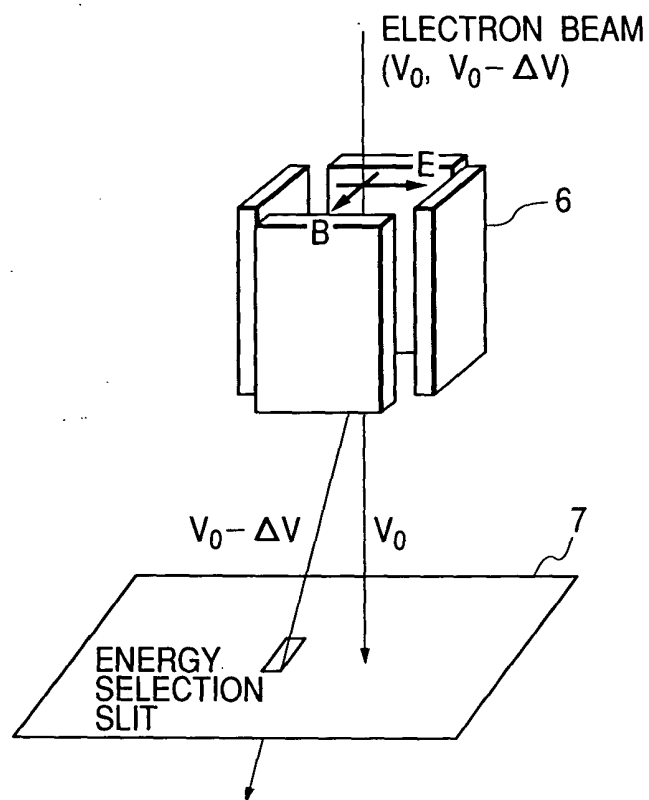
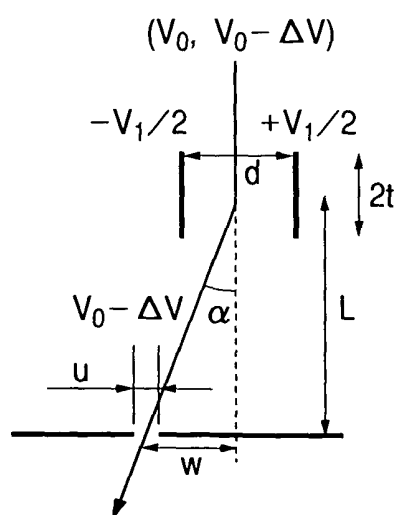
FIG. 3A**FIG. 3B**

FIG. 4

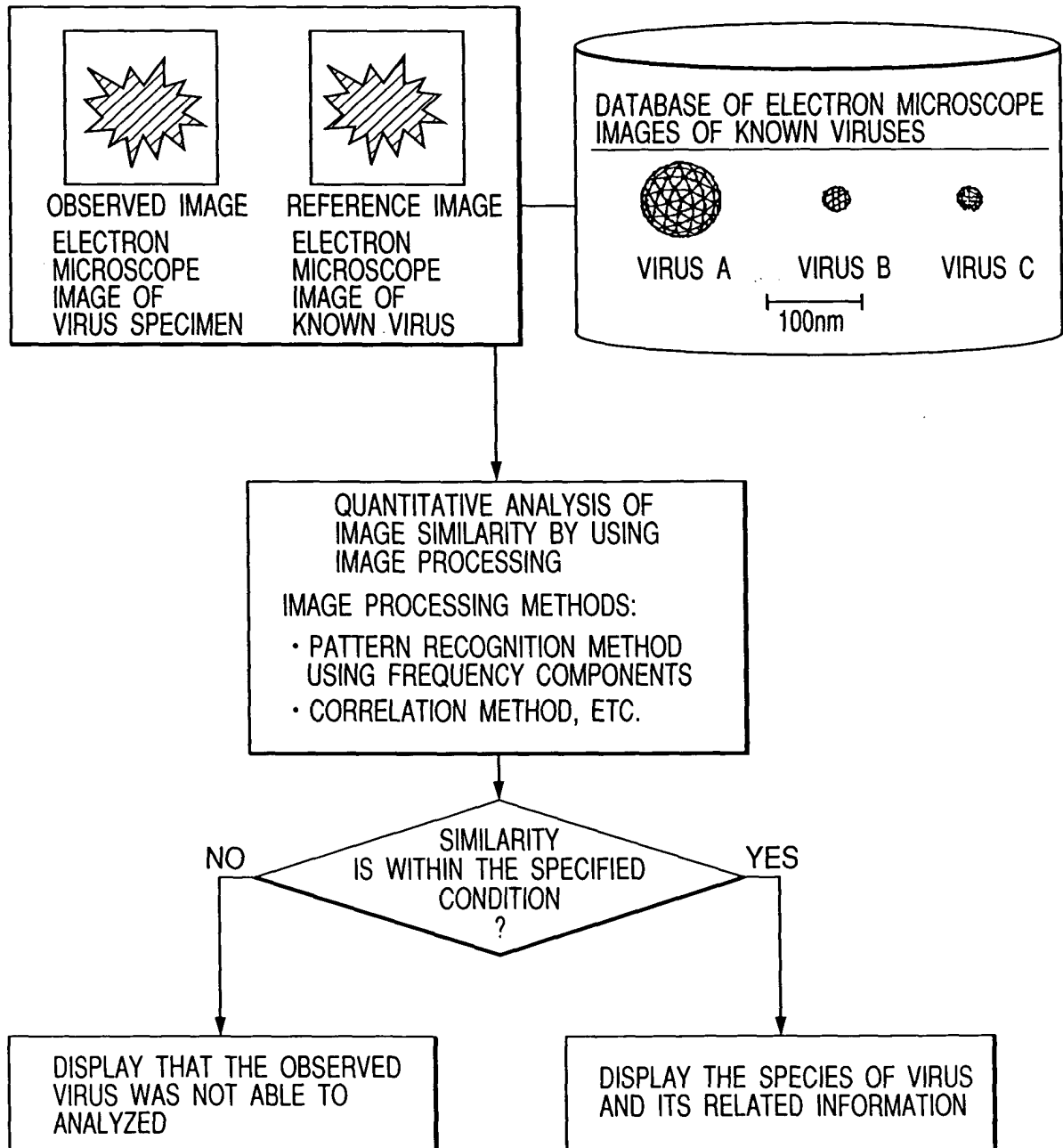


FIG. 5

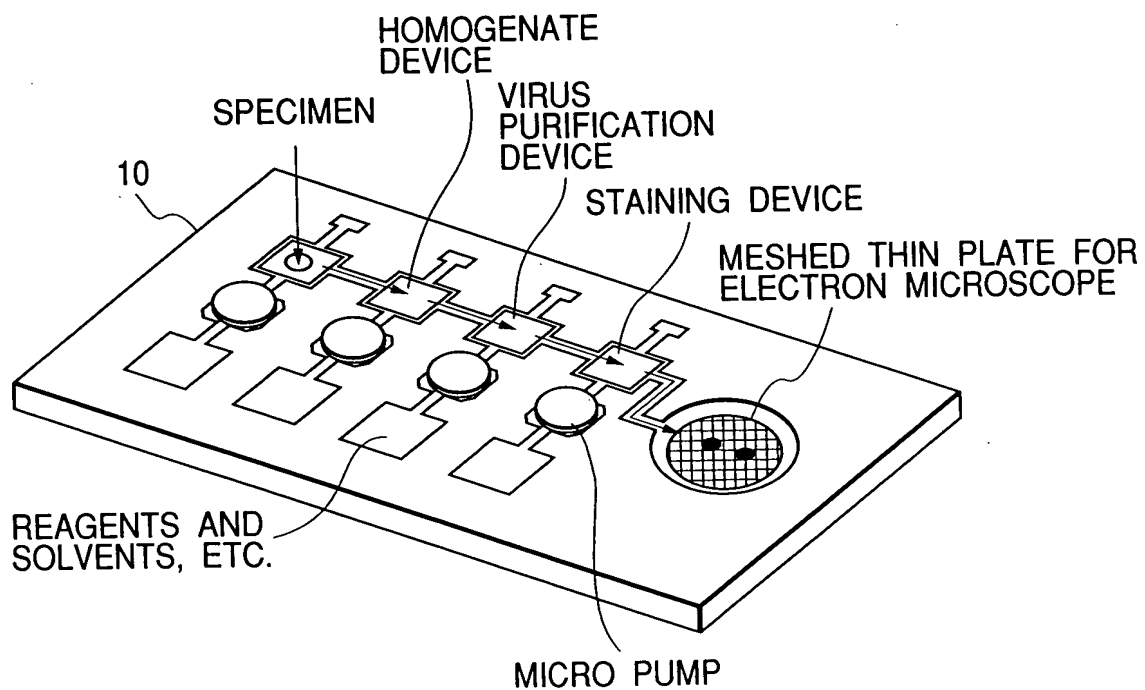


FIG. 6
(TABLE 1)

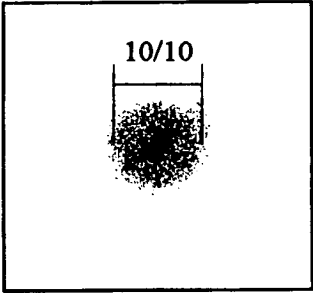
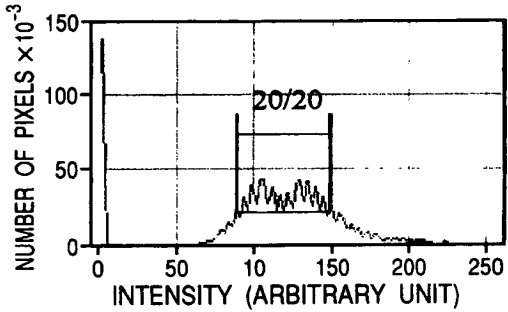
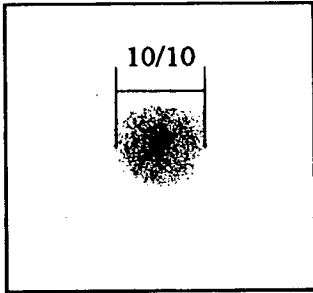
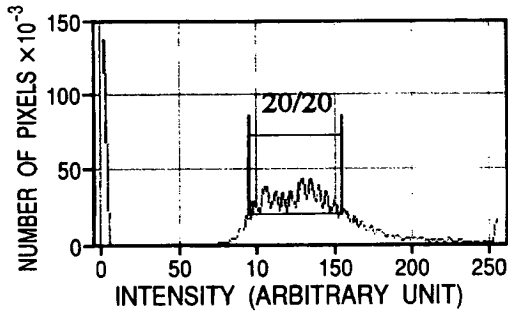
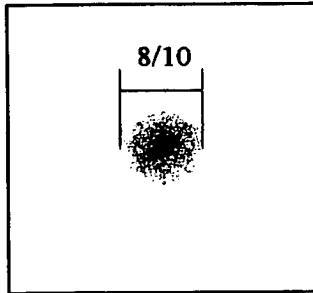
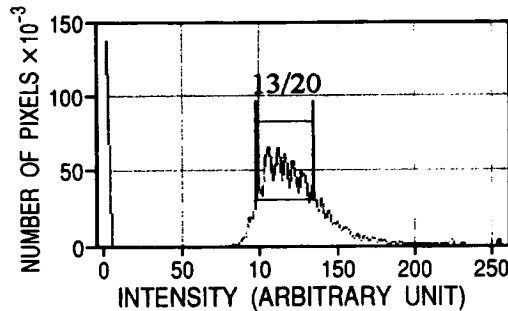
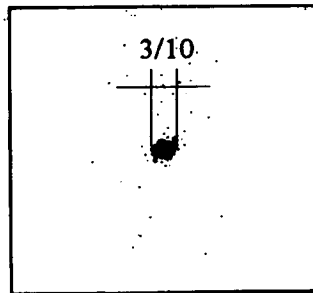
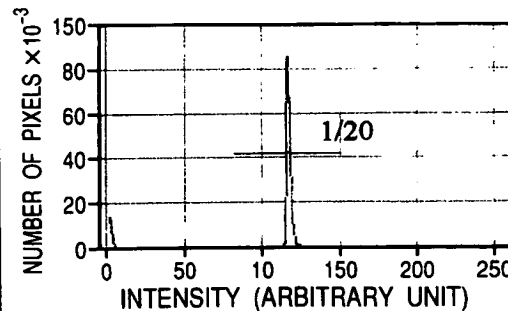
ACCELERATING VOLTAGE	RESOLUTION (FFT OF □ AREA IN THE IMAGE)	CONTRAST
30kV		
10kV		
5kV		
3kV		

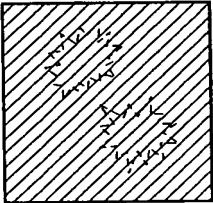
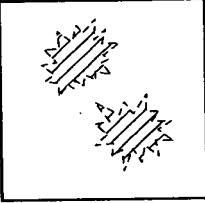
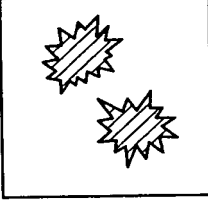
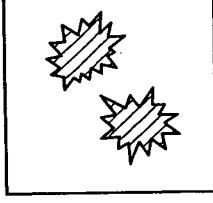
FIG. 7
(TABLE 2)

SPECIMEN	CRITICAL ELECTRON ACCELERATING VOLTAGE POSSIBLE TO TRANSMIT A SPECIMEN (a)	OPTIMUM ACCELERATING VOLTAGE (b)	FACTOR m (b/a)
ARABIDOPSIS (100nm THICK)	3.0kV	7.5kV	2.5
MOUSE (100nm THICK)	3.5kV	9.0kV	2.6
MOUSE (300nm THICK)	5.5kV	14.0kV	2.5

FIG. 8
(TABLE 3)

SPECIMEN	STAINED SECTION	NEGATIVE STAINED SECTION	FROZEN SECTION
ELEMENTS	C(53%), O(23%), N(16%), H(7%), S(2%)	SAME AS IN THE LEFT OK	H(49.7%), O(24.9%), C(24.9%), N
STAINING ATOMS	Pb, U	W	NON (UNSTAINED)
AVERAGE ATOMIC NUMBER OF STAINING ATOMS	87	74	-
AVERAGE ATOMIC MASS OF STAINING ATOMS	222.5	184	-
DENSITY FLUCTUATION DEPENDING ON THE AREA	$\pm 60\%$	$\pm 30\%$	NON
RANGE OF FACTOR	1.2 ~ 4.2	1.6 ~ 3.5	2.0 ~ 3.0

FIG. 9
(TABLE 4)

ACCELERATING VOLTAGE	3kV	5kV	10kV	30kV
IMAGES				
CONTRAST	1 / 20	13 / 20	20 / 20	20 / 20
RESOLUTION	3 / 10	8 / 10	10 / 10	10 / 10